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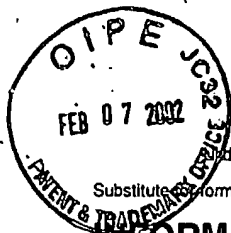
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: *wa-2121*

Examiner Name: *wa-JP/arc*

Attorney Docket Number: 05222.00159

(Use as many sheets as necessary)

Sheet 1 of 14

U.S. PATENT DOCUMENTS

Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Words, or Figures Apparent
		Number - Kind Code ² (if known)			
<i>H</i>		US-4,622,013	11/11/1986	Cherchio	
<i>H</i>		US-4,874,784	10/17/1989	Clancey	
<i>H</i>		US-4,981,766	01/02/1990	Derr, et al.	
<i>H</i>		US-4,931,950	06/05/1990	Isle, et al.	
<i>H</i>		US-4,964,077	10/16/1990	Eisen, et al.	
<i>H</i>		US-4,977,529	12/11/1990	Gregg, et al.	
<i>H</i>		US-5,002,491	03/26/1991	Abrahamson, et al.	
<i>H</i>		US-5,170,464	12/08/1992	Hayes, et al.	
<i>H</i>		US-5,189,402	02/23/1993	Naimark, et al.	
<i>H</i>		US-5,208,745	05/04/1993	Quentin, et al.	
<i>H</i>		US-5,208,898	05/04/1993	Funabashi, et al.	
<i>H</i>		US-5,239,617	08/24/1993	Gardner, et al.	
<i>H</i>		US-5,259,766	11/09/1993	Sack et al.	
<i>H</i>		US-5,267,865	12/07/1993	Lee, et al.	
<i>H</i>		US-5,310,349	05/10/1994	Daniels, et al.	
<i>H</i>		US-5,311,422	05/10/1994	Loftin, et al.	
<i>H</i>		US-5,317,688	05/31/1994	Watson, et al.	
<i>H</i>		US-5,326,270	07/05/1994	Ostby, et al.	
<i>H</i>		US-5,359,701	10/25/1994	Chiang, et al.	
<i>H</i>		US-5,372,507	12/13/1994	Goleh	

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Examiner Initials *	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Apparent
		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)			
		EP 0 689 132 A2	12/27/95	Laffra	
		EP 0 710 942 A2	05/08/96	Siefert	
		EP 0 710 942 A2	05/08/96	Siefert	
		EP 0 798 655 A2	10/01/97	Jervis, et al.	
		WO 00/04478	01/27/00	Jonsson	
		WO 97/44766	11/27/97	Cook	
		WO 98/03953	01/29/98	Simmons	
		WO 98/25251	06/11/98	Ho	
		WO 98/32109	07/23/98	De Lange	

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Date
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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: n/a- 2/21,

Examiner Name: n/a

Attorney Docket Number: 05222.00159

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Sheet 2 of 14

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U.S. PATENT DOCUMENTS

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Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
A		US-5,395,243	03/07/1995	Lutbin, et al.	
A		US- 5,441,415	08/15/1995	Lee, et al.	
H		US- 5,491,743	02/13/1996	Shilo, et al.	
R		US- 5,533,903	07/09/1996	Kennedy	
H		US- 5,535,422	07/09/1996	Chang, et al.	
M		US- 5,537,141	07/16/1996	Harper, et al.	
H		US- 5,539,869	07/23/1996	Spoto, et al.	
H		US- 5,566,291	10/15/1996	Boulton, et al.	
H		US- 5,576,844	11/19/1996	Anderson, et al.	
H		US- 5,577,186	11/19/1996	Mann II, et al.	
H		US- 5,597,312	01/28/1997	Bloom, et al.	
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A		US- 5,644,686	07/01/1997	Hekmatpour	
H		US- 5,644,727	07/01/1997	Atkins	
H		US- 5,673,369	09/30/1997	Kim	
H		US- 5,690,496	11/25/1997	Kennedy	
H		US- 5,696,885	12/09/1997	Hekmatpour	
H		US- 5,701,400	12/23/1997	Amado	
H		US- 5,720,007	02/17/1998	Hekmatpour	
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Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: 2101

Examiner Name: [illegible]

Attorney Docket Number: 05222.00159

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		"Evaluating the effectiveness of feedback in SQL-tutor", IEEE, proc. Int. workshop IWALT, pp 143-144	
		"Automated-Exercise Progression in Simulation-Based Training," IEEE Trans. On Systems, Man, and Cybernetics, Vol. 24(6), pp. 863-74, June 1994	
		"ACM-Transactions on Information Systems," 1988 at www.acm.org/pubs/loc/Abstracts/tois/592984.htm	
		The Virtual Classroom: Great Expectations. Delivering Graduate Education by Computer. Addison Wesley Longman, 1996.	
		"A Special Section-- Goal Based Scenarios: A New Approach to Professional Education: Reengineering Education at Andersen Consulting," Educational Technology, Nov.-Dec. 1994	
		"Goal-Based Scenarios and the Problem of Situated Learning: A Commentary on Andersen Consulting's Design of Goal-Based Scenarios," Educational Technology, Nov.-Dec. 1994	
		"DDD--A Free Graphical Front-End for UNIX Debuggers," Jan. 1996, ACM Sigplan Notices, Vol. 31, No. 1, pp. 22-27	
		"Automated Training of Legal Reasoning" at http://www.bileta.ac.uk/94papers/muntjew.html	
		"The Virtual Learning Environment System," 28th Annual Frontiers in Education Conference, Conference Proceedings, Vol. 2, Nov. 4-7, 1998	
		"Developing a Design System into an Intelligent Tutoring System," Int'l J. Engr. Eud., Vol. 13(5), pp-341-46, Dec. 1997	
		"CAPTOR-a model for delivering web based intelligent tutoring system technology", IEEE Proc. DASC vol. 2, pp 5.C.4.1-5	

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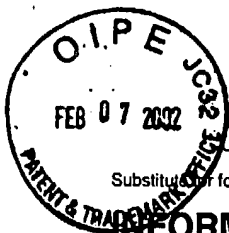
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date : 02/08/1999

First Named Inventor: Nichols

Group Art Unit: n/a

Examiner Name: n/a

Attorney Docket Number: 05222-2002

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OTHER PRIOR ART -- NON PATENT LITERATURE DOCUMENTS			
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		"Bridging the Virtual and the Physical: The InterSim as a Collaborative Support Interface," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 556-58, Dec. 1997	
		"Task-Oriented Learning on the Web"; Innovations in Education and Training International, Vol. 36, No. 1, Feb. 1999	
		"Applications of BrainMaker-Neural Network to stocks, business, medical, manufacturing" at www.calsci.com/Applications.html	
		"KBLPS Overview" at www.cgi.com/CGIWEB/KBLPS/overIndex4.html	
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		"Interactive Multimedia Instructs the Individual," Oct. 1994, Occupational Health & Safety, Vol. 63, No. 10, pp. 144-145	
		"Practical methods for automatically generating typed links", ACM Hypertext, pp 31-41	
		"Popular Theory Supporting the Use of Computer Simulation for Experiential Learning," http://www.centurionsys.com/rcl57.html , Aug. 1997	
		"Technical Report: Computer Aided Education and Training Initiative" at http://advlearn.lrdc.pitt.edu/advlearn/papers/FINALREP.html	
		"FRA: Teaching Financial Accounting with a Goal-Based Scenario," Intelligent Systems in Accounting, Finance and Management, Vol. 4, 1995	
		"Teaching Real-World Analysis Skills for Goal-Based Scenario," pp. 68-74	

Examiner Signature		Date Considered	8/2/4
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¹ Unique citation designation number (optional). ² Applicant is to place a check mark here if English language Translation is attached.

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 3 of 14

PTO/SB/08A (10-01)
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U.S. Patent and Trademark Office: U.S. DEPARTMENT OF COMMERCE
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Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: ~~n/a~~ 217
Examiner Name: ~~n/a~~ J. B. HILL
Attorney Docket Number: 0522.00159

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U.S. PATENT DOCUMENTS CENTER R3700					
Examiner Initials *	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
K		US-5,727,950	03/17/1998	Cook, et al.	
H		US- 5,745,652	04/28/1998	Bigus	
A		US- 5,772,446	06/30/1998	Rosen	
A		US- 5,779,468	07/14/1998	Ho, et al.	
A		US- 5,788,508	08/04/1998	Lee, et al.	
A		US- 5,791,907	08/11/1998	Ramshaw, et al.	
A		US- 5,799,151	08/25/1998	Hoffer	
A		US- 5,799,292	08/25/1998	Hekmatpour	
A		US- 5,806,056	09/08/1998	Hekmatpour	
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A		US- 5,822,745	10/13/1998	Hekmatpour	
A		US- 5,823,781	10/20/1998	Hitchcock, et al.	
A		US- 5,823,788	10/20/1998	Lemelson, et al.	
A		US- 5,835,683	11/10/1998	Corella, et al.	
A		US- 5,868,575	02/09/1999	Kuczewski	
A		US- 5,870,768	02/09/1999	Hekmatpour	
A		US- 5,875,437	02/23/1999	Atkins	
A		US- 5,889,845	03/30/1999	Staples, et al.	
A		US- 5,893,123	04/06/1999	Tuinenga	
A		US- 5,911,581	06/15/1999	Knight Jeremy, et al.	

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Examiner Signature		Date Considered	8/2/4	TECH
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Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"Artificial Intelligence and Mathematics Education" at http://www.rand.org/hot/mcarthur/Papers/aied.html	
		"The Roles of Artificial Intelligence in Education: Current Progress and Future Prospects" at http://www.nib.unicamp.br/recursos...education/intelligent-tutoring.html	
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		"Development of an Integrated Simulator and Real Time Plant Information System," Advances in Operational Safety of Nuclear Power Plants, Proceedings of an International Symposium 1996.	

Examiner Signature		Date Considered	8/2/4
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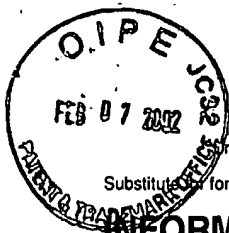
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Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: n/a 2121

Examiner Name: n/a J P 412

Attorney Docket Number: 10522200159

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Sheet 8 of 14

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OTHER PRIOR ART – NON PATENT LITERATURE DOCUMENTS			
Examiner Initials *	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		"A Goal-Centered Architecture for Intelligent Tutoring Systems," Proc. Of 7th World Conf. On Artificial Intelligence in Education, pp. 307-314, Aug. 1995	
		"Smart Avatars in JackMOO," Proceedings of the 1999 IEEE Conference on Virtual Reality, pp. 156-63	
		"Embedding an Intelligent Tutoring System in a Business Gaming-Simulation Environment," Proc. Of the 1994 Winter Simulation Conference, pp. 1399-1406, Dec. 1994	
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		"Persistent Issues in the Application of Virtual Environment Systems to Training," August 1996, Proceedings. Third Annual Symposium on Human Interaction with Complex Systems, IEEE, pp. 124-32.	
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		"Understanding Organizational Dynamics of IT-Enabled Change: A Multimedia Simulation Approach," Winter 1997/1998, Journal of Management Information Systems: JIMIS, Vol. 14, No. 3, pp. 109-140.	
		"Intelligent Computer-Aided Instruction: A Survey Organized Around System Components," Jan. 1989, IEEE Inc., New York, Vol. 49, No. 1, pp. 40-57.	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868.682

Filing Dat : 02/08/1999

First Named Inventor: Nichols

Group Art Unit: ~~wa~~ 2121

Examiner Name: n/a J P A/R

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: 217

Examiner Name: n/a

Attorney Docket Number: 0522200159

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		"Conducting and Supporting a Goal-Based Scenario Learning Environment," Educational Technology, Nov.-Dec. 1994	
		"Interface design issue for advising giving expert systems", Comm. Of the ACM, vol 30, no. 1, pp14-31	
		"An Object-Oriented Architecture for Evolutional Development of Interactive Learning Environment with Coached Problem-Solving," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 592-94, Dec. 1997	
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		"Socialized Collaborative Learning in Multimedia Virtual Worlds" URL: http://www.iscs.nus.edu.sg/labs/learning/els/VRML.html ; viewed Feb. 16, 1999	
		Flexible Learning; Feb. 1998; Credit Union Management Vol. 21, No. 2, pp. 32-33+	
		"Teaching Through Case-Based Reasoning: An ITS Engine Applied to Business Communication," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 111-18 Dec. 1997	
		"Train with Less Pain," Oct. 13, 1997, Informationweek No. 652, pp. 150-154	
		"Virtual Learning: A Revolutionary Approach to Building a Highly Skilled Workforce," Autumn 1998, Personnel Psychology Vol. 51, No. 3, pp. 767-71	
		"Intelligent Tutoring Systems: An Overview" at http://www.intellectbooks.com/authors/lawler/its.htm	

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Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: nva-2121

Examiner Name: nva

Attorney Docket Number: 05222.00159

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		"No More Boring CPE," July 1997, Accounting Technology, pp. 27-35	
		Computer Dictionary, 1997, pp. 264, 276, 383, 446, 462, 507.	
		"Rule-Based Programming with OPS5" at www.mkp.com/books_catalog/O-934613-51-6.asp	
		"From Computer-Assisted Instruction to Intelligent Tutoring Systems," J. Artificial Intelligence in Education, V. 2(3), pp. 39-50, Dec. 1997	
		"MUSE U.S. Patents" at www.muser.com/html/patents.html	
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		"An Electronic Infrastructure for a Virtual University," Communications of the ACM, Vol. 40, No. 9, Sep. 1997.	
		"Simulation Technology and Parallelism in Learning Environments" at http://www.to.utwente.nl/pr/min/Book/chapter1.htm	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date : 02/08/1999
First Named Inventor: Nichols
Group Art Unit: rva 2136
Examiner Name: rva
Attorney Docket Number: 05222.00159

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		"Engines for Education" URL: http://www.ils.nwu.edu/~e_for_e/nodes/I-M-INTRO-ZOOMER-pg.html ; viewed Feb. 15, 1999.	
		"FinPlan System" at www.rlat.org.ru/FinPlan/	
		"Enhancing Simulation Education with Intelligent Tutoring Systems," Proc. Of the 1996 Winter Simulation Conf., pp. 675-80, Dec. 1996	
		"Computer Aided Instruction for Statistics: A Knowledge-Based Systems Approach," Int'l J. of Computers in Adult Education and Training, Vol. 5(1), pp. 3-14.	
		"Teaching with the Internet" 1998, JAI Press Inc., USA. Vol no. 3, pp 217-222	
		"Development of a Simulation-Based Intelligent Tutoring System for Assisting PID Control Learning," Jan. 1994, IEICE Transactions on Information and Systems, E77-D, No. 1, Tokyo Japan, pp. 108-17.	
		"Authoring Intelligent Tutoring Systems: An Analysis of the State of the Art" at http://www.cs.umass.edu/~tmurray/papers/ATSummary/AuthTools.html	
		"Multimedia Training 'Get Lemonade, Not a Lemon'" June 1997, Journal for Quality and Participation vol. 20, No. 3, pp. 22-26	
		"SMART Evaluation: Cognitive Diagnosis, Mastery Learning & Remediation," Proc. Of 7th World Conf. On Artificial Intelligence in Education, pp. 123-30, Aug. 1995	
		"Decision Pro3.0" at www.vanguardsw.com/	

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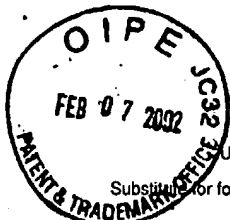
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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868,682

Filing Date: 02/08/1999

First Named Inventor: Nichols

Group Art Unit: ~~n/a~~ 2134

Examiner Name: ~~n/a~~ J B HIR

Attorney Docket Number: 05222.00159

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		"A-Fuzzy-Logic-Based-Intelligent-Tutoring-System," Information-Processing-92, Vol. II, pp. 66-72, Dec. 1992.	
		"The-SimQuest-Authoring-System-for-Simulation-Based-Discovery Learning," Proc. Of 1997 World Conf. On Artificial Intelligence in Education, pp. 79-86, Dec. 1997	
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		"Goal-Based-Scenarios and Business-Training:- A Conversation with Roger C. Schank," Educational Technology, Nov.-Dec. 1994	
		"Automate-Your-Business-Plan" at www.business-plan.com/screen2.html	
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		"TurboTax Deluxe Product Information" at http://www.intuit.com/turbotax/prodinfo/ttdlx.html	
		"Why-Should-the-Teens-Have-All-the-Best-Games?...Management Skill with Oil, Health, Housing Games," Computergram Int'l, June 176, 1996	
		"Template Software Business Simulator, Chapter 8, August 1997	
		"Template Software Workflow Simulator, Chapter 8, June 1998	
		"Goal-Based Scenarios"; Technical Report # 36; Northwestern University, The Institute for the Learning Sciences, December 1992, pp. 1-30	

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

Application Number : 09/868.682

Filing Dat : 02/08/1999

First Named Inventor: Nichols

Group Art Unit: ~~wa~~ 2126

Examiner Name: *wa JPH*
Attorney Docket Number: 05222.00159

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		"Eight Goal-Based Scenario-Tools", Technical Report # 67, Northwestern University, The Institute for the Learning Sciences, January 1996, pp. 1-37	
		"A Role for AI in Education: Using Technology to Reshape Education", Northwestern University, The Institute for the Learning Sciences, Journal of Artificial Intelligence in Education, Winter 1990, January 1990, pp. 1-24 and 2 pgs. of references	
		"The Design of Goal-Based Scenarios", Technical Report # 39, Northwestern University, The Institute for the Learning Sciences; March 1993; pp. 1-58-	

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